

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: September 23, 1996
Date Received: September 19, 1996
Project: City Water (Minerals), PO #M72938
Date Samples Extracted: September 19, 1996
Date Extracts Analyzed: September 20, 1996

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR IRON, CALCIUM, AND MAGNESIUM
USING METHOD 6010**

**Samples Processed Using Method 3005A
Results Reported as mg/L (ppm)**

<u>Sample ID</u>	<u>Iron</u>	<u>Calcium</u>	<u>Magnesium</u>
M72938	<1	8	1
Method Blank	<1	<1	<1

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**QUALITY ASSURANCE RESULTS
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Laboratory Code: 72895 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Iron	mg/L (ppm)	<1	<1	nm	0-20
Calcium	mg/L (ppm)	8	9	12	0-20
Magnesium	mg/L (ppm)	1	1	0	0-20

Laboratory Code: 72895 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery		Acceptance Criteria	Relative Percent Difference
				MS	MSD		
Iron	mg/L (ppm)	10	<1	87	87	80-120	0
Calcium	mg/L (ppm)	10	8	79 b	79 b	80-120	0
Magnesium	mg/L (ppm)	10	1	106	104	80-120	2

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery		Acceptance Criteria	Relative Percent Difference
			MS	MSD		
Iron	mg/L (ppm)	10	89	87	80-120	2
Calcium	mg/L (ppm)	10	82	80	80-120	2
Magnesium	mg/L (ppm)	10	99	97	80-120	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

b - The analyte was spiked at a level less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

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9-19-96
1:55pm

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D
Beth M. Albertson, M.S.
Bradley T. Benson
Kelley D. Wilt

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044

September 23, 1996

**INVOICE # 96ACU0923-1
DUPLICATE COPY**

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project City Water (Minerals), PO #M72938: Results of testing requested by
Gerry Thompson , Project Manager for material submitted on September 19,
1996.

1 water sample analyzed for
Iron, Calcium, and Magnesium
using Method 6010 @ \$55 per sample

\$ 55.00

Amount Due

\$ 55.00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044

September 23, 1996

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on September 19, 1996 from your City Water (Minerals), PO #M72938 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson
Chemist

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Enclosures
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